

IN THE CLAIMS:

C 1. (Currently amended) A method in a communications system for routing a call, the method comprising:

- receiving a call;
- identifying call routing information for the call;
- responsive to identifying call routing information, determining whether a function ~~to be performed by the subscriber~~ has been selected for routing the call; and
- responsive to a determination that a function ~~to be performed by the subscriber~~ has been selected for routing the call, routing the call using a sequence of destinations associated with the function ~~to be performed by the subscriber~~;
- monitoring results from routing of the call; and
- automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

2. (Original) The method of claim 1 further comprising:

- responsive to identifying call routing information, determining whether a call routing schedule based on time has been selected for routing the call; and
- responsive to a determination that a call routing schedule based on time is to be used, routing the call using a call routing schedule based on time.

3. (Currently amended) The method of claim 1, further comprising:

- responsive to a determination that a function ~~to be performed by the subscriber~~ has been selected for routing the call, determining whether a time period for the function ~~to be performed by the subscriber~~ has expired;
- responsive to a determination that a time period for the function ~~to be performed by the subscriber~~ has expired, routing the call; and
- routing the call using a call routing schedule based on time instead of using the sequence of destinations associated with the function ~~to be performed by the subscriber~~.

4. (Canceled)

5. (Currently amended) The method of claim 1, wherein the call is routed to a subscriber associated with the function to be performed by the subscriber.

6. (Original) The method of claim 2 further comprising:
monitoring results from routing of the call to the subscriber; and
automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

7. (Original) A method in a communications system for call routing a call, the method comprising:
receiving a call to a subscriber;
routing the call to the subscriber using a sequence of destinations associated with the subscriber; and
responsive to a success of routing the call to the subscriber to a destination within the sequence of destinations, automatically modifying the sequence of destinations used to call the subscriber, wherein the sequence of destinations is modified to favor destinations with successful call completions.

8. (Original) The method of claim 7, wherein the sequence of destinations is modified to favor destinations with a selected level of call completions.

9. (Original) The method of claim 7 further comprising:
responsive to detecting initiation of a call by the subscriber from an origin absent from the sequence of destinations, modifying the sequence of destinations to include the origin as a destination within the sequence of destinations.

10. (Original) The method of claim 8, wherein the origin is included as a destination within the sequence of destinations for a period of time.

11. (Original) The method of claim 8, wherein the calling line identifier is recorded to identify the origin from which the subscriber initiated the call.

12. (Original) The method of claim 7, wherein the sequence of destinations are associated with a time slot.

13. (Original) The method of claim 7, wherein the sequence of destinations are associated with a function.

14. (Previously canceled)

15. (Previously canceled)

16. (Original) A method in a communications system for call routing a call, the method comprising:

receiving a call to a subscriber;

identifying a time of the call;

routing the call to the first destination in an ordered set of destinations for the subscriber based on the time of the call;

responsive to an absence of an answer of the call at the first destination, routing the call to a second destination in the ordered set of destinations;

responsive to an absence of an answer of the call at the second destination, routing the call to a third destination in the ordered set of destinations; and

responsive to an answer of the call at the third destination for a number of times, selecting the third alternate destination as the first alternate destination.

17. (Original) The method of claim 16, wherein the second alternate destination is selected as the first alternate destination for a temporary period of time.

18. (Original) The method of claim 17, wherein the temporary period of time is a day.

C 19. (Original) The method of claim 16 further comprising:
responsive to the third destination being answered over a period of time, setting the third destination as the second destination.

20. (Original) The method of claim 16 further comprising:
responsive to the second destination being answered over a period of time, setting the second destination as the first destination.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Currently amended) A switch comprising:
an input for receiving a call for a subscriber party;
signaling interface for sending a request to a database for call routing information, wherein call routing information from the database includes a calling sequence for a function associated with and to be performed by the subscriber in

response to the subscriber previously selecting the function ~~to be performed by the subscriber~~; and

a switch fabric, wherein the call is routed from the input through the switch fabric to an output to a destination returned by the database using the calling sequence for the function ~~to be performed by the subscriber~~ wherein the sequence of destinations is automatically modified in response to a success of routing the call to the subscriber to a destination within the sequence of destinations and wherein the sequence of destinations is modified to favor destinations with successful call completions.

29. (Original) The switch of claim 28, wherein the request sent from the signaling interface to the database is sent to a service control point, which provides an interface to the database.

30. (Currently amended) A service control point comprising:

an input/output interface, wherein request for routing information is received from a requestor at the input/output interface and routing information returned to the requestor;

a database containing a plurality of calling sequences for subscribers; and

a processing unit connected to the input/output interface and the database, wherein the processing unit has a plurality of modes of operation including:

a first mode of operation in which the processing unit monitors for requests for routing information;

a second mode of operation, responsive to receiving a request, in which the processing unit identifies routing information for the call;

a third mode of operation, responsive to identifying routing information for the call, in which the processing unit determines whether a function has been selected for routing the call;

a fourth mode of operation, responsive to a determination that a function has been selected for routing the call, in which the processing unit sends routing information for the call using a sequence of destinations associated with the function; ~~and~~

a fifth mode of operation, responsive to an absence of a determination that a function has been selected for routing the call, in which the processing unit sends routing information for the call using a call routing schedule based on time;

a sixth mode of operation for monitoring results from routing of the call; and

a seventh mode of operation for automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

31. (Currently amended) A communications system for routing a call, the communications system comprising:

receiving means for receiving a call;

identifying means for identifying call routing information for the call;

determining means, responsive to identifying call routing information, for determining whether a function ~~to be performed by the subscriber~~ has been selected for routing the call; and

routing means, responsive to a determination that a function ~~to be performed by the subscriber~~ has been selected for routing the call, for routing the call using a sequence of destinations associated with the function ~~to be performed by the subscriber~~;

first monitoring means for monitoring results from routing of the call; and

second modifying means for automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

32. (Original) The communications system of claim 31 further comprising:

determining means, responsive to identifying call routing information, for determining whether a call routing schedule based on time has been selected for routing the call; and

routing means, responsive to a determination that a call routing schedule based on time is to be used, for routing the call using a call routing schedule based on time.

33. (Currently amended) The communications system of claim 31, further comprising:

determining means, responsive to a determination that a function ~~to be performed by the subscriber~~ has been selected for routing the call, for determining whether a time period for the function ~~to be performed by the subscriber~~ has expired;

first routing means, responsive to a determination that a time period for the function ~~to be performed by the subscriber~~ has expired, for routing the call; and

second routing means for routing the call using a call routing schedule based on time instead of using the sequence of destinations associated with the function ~~to be performed by the subscriber~~.

34. (Canceled)

35. (Currently amended) The communications system of claim 31, wherein the call is routed to a subscriber associated with the function ~~to be performed by the subscriber~~.

36. (Original) The communications system of claim 32 further comprising:

monitoring means for monitoring results from routing of the call to the subscriber; and

modifying means for automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

37. (Original) A communications system for call routing a call, the communications system comprising:

receiving means for receiving a call to a subscriber;

routing means for routing the call to the subscriber using call a sequence of destinations associated with the subscriber; and

modifying means, responsive to a success of routing the call to the subscriber to a destination within the sequence of destinations, for automatically modifying the sequence

of destinations used to call the subscriber, wherein the sequence of destinations is modified to favor destinations with successful call completions.

38. (Original) The communications system of claim 37 further comprising:
modifying means, responsive to detecting initiation of a call by the subscriber from an origin absent from the sequence of destinations, for modifying the sequence of destinations to include the origin as a destination within the sequence of destinations.

39. (Original) The communications system of claim 38, wherein the origin is included as a destination within the sequence of destinations for a period of time.

40. (Original) The communications system of claim 38, wherein the calling line identifier is recorded to identify the origin from which the subscriber initiated the call.

41. (Original) The communications system of claim 37, wherein the sequence of destinations are associated with a time slot.

42. (Original) The communications system of claim 37, wherein the sequence of destinations are associated with a function.

43. (Original) A communications system for call routing a call, the communications system comprising:

receiving means for receiving a call to a subscriber;

routing means for routing the call using call routing information associated with the subscriber;

monitoring means for monitoring results from routing of the call to the subscriber;
and

modifying means for automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

44. (Original) The communications system of claim 43, wherein the means of routing the call comprises:

first routing means for routing the call to a main destination; and
second routing means, responsive to an absence of an answer at the main destination, for routing the call to an alternate destination.

45. (Original) A communications system for call routing a call, the communications system comprising:

receiving means for receiving a call to a subscriber;
identifying means for identifying a time of the call;
first routing means for routing the call to the first destination in an ordered set of destinations for the subscriber based on the time of the call;
second routing means, responsive to an absence of an answer of the call at the first destination, for routing the call to a second destination in the ordered set of destinations;
responsive to an absence of an answer of the call at the second destination, routing the call to a third destination in the ordered set of destinations;
responsive to an answer of the call at the third destination for a number of times, selecting the third alternate destination as the first alternate destination.

46. (Original) The communications system of claim 45, wherein the second alternate destination is selected as the first alternate destination for a temporary period of time.

47. (Original) The communications system of claim 46, wherein the temporary period of time is a day.

48. (Original) The communications system of claim 45 further comprising:
setting means, responsive to the third destination being answered over a period of time, for setting the third destination as the second destination.

49. (Original) The communications system of claim 45 further comprising:

setting means, responsive to the second destination being answered over a period of time, for setting the second destination as the first destination.

50. (Canceled)

51. (Canceled)

52. (Canceled)

53. (Canceled)

54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Currently amended) A computer program product in a computer readable medium for routing a call, the computer program product comprising:

first instructions for receiving a call;

second instructions for identifying call routing information for the call;

third instructions, responsive to identifying call routing information, for determining whether a function to be performed by the subscriber has been selected for routing the call; and

fourth instructions, responsive to a determination that a function to be performed by the subscriber has been selected for routing the call, for routing the call using a sequence of destinations associated with the function to be performed by the subscriber;

fifth instructions for monitoring results from routing of the call; and

sixth instructions for automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

58. (Original) A computer program product in a computer readable medium for call routing a call, the computer program product comprising:

first instructions for receiving a call to a subscriber;

second instructions for routing the call to the subscriber using call a sequence of destinations associated with the subscriber; and

third instructions, responsive to a success of routing the call to the subscriber to a destination within the sequence of destinations, for automatically modifying the sequence of destinations used to call the subscriber, wherein the sequence of destinations is modified to favor destinations with successful call completions.

59. (Original) A computer program product in a computer readable medium for call routing a call, the computer program product comprising:

first instructions for receiving a call to a subscriber;

second instructions for identifying a time of the call;

third instructions for routing the call to the first destination in an ordered set of destinations for the subscriber based on the time of the call;

fourth instructions, responsive to an absence of an answer of the call at the first destination, for routing the call to a second destination in the ordered set of destinations;

fifth instructions, responsive to an absence of an answer of the call at the second destination, for routing the call to a third destination in the ordered set of destinations;

sixth instructions, responsive to an answer of the call at the third destination for a number of times, for selecting the third alternate destination as the first alternate destination.

60. (Canceled)